



*HAL 80-P-18251*  
**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/627,195    07/27/00    ECHOLS    R    990453 U1 US

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PM62/0913

*Received*

EXAMINER

SEP 17 2001

STEPHENSON, D

ART UNIT

PAPER NUMBER

Crutsinger & Booth

DATE MAILED:

09/13/01

(P) 10/13/01  
11/13/01  
12/13/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Office Action Summary**

Application No.

09/627,195

Applicant(s)

ECHOLS ET AL.

Examiner

Daniel P Stephenson

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8 and 12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. An expansion tool, which would be able to move through the screen jacket in a top to bottom motion after the screen had been placed above it, is not disclosed in the specification. An activation assembly is also not described within the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10 and 11 are indefinite due to the fact that claim 10 is dependent upon itself.

Correction is required.

Claims 10-12 recites the limitation "screen shroud" in their first lines. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "downhole force generator" in the second line. There is insufficient antecedent basis for this limitation in the claim.

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 2, 4, 5, and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Haut et al.

Haut et al. (Abstract, Figs. 1, 2, 4, and 5, col. 3 lines 5-39, col. 4 lines 21-34 and 51-61) discloses a method of sand-control in a subterranean well comprising the steps of inserting a screen, pumping a sand control medium between the screen and the borehole, inserting an expansion tool and moving said expansion tool through the screen causing it to expand. It refers to the expansion tool as a “pig” which is common in the art, and said pig can be pushed or drawn through the tubing to expand it.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohbeck in view of Koehler et al.

Lohbeck (Figs. 1, 2, 5, and 6, col. 2 line 43- col. Col. 3 line 9, col. 4 line 18- 24) discloses a radially expandable wellbore screen (11), which is inserted after an expansion tool (15) is, or alternatively, as provided, inserted after the screen is. Said expansion tool being used to expand the screen against the borehole, by moving through it in an upward manner. Lohbeck does not disclose that a sand-control medium is pumped into the annular space between the screen and the borehole before the screen is expanded. Nor does it disclose that the sand-control medium substantially fills the gap between the screen and borehole, after the screen has been expanded. Koehler et al. (col. 5 line 56-col. 6 line 7) discloses that it is common for a filter for a wellbore to be "gravel packed", by inserting a sand-control medium between a filter and the borehole, after the filter has been inserted. It would have been obvious to one of ordinary skill in the art at the time the invention was made to "gravel pack" as described in Koehler et al. around the screen of Lohbeck. The motivation for doing this would be to provide an easy method of filtration and an additional level of filtration beyond just the filter provided, as taught by Koehler et al. The screen would be expanded after the gravel packing to reduce any gaps within the packing material, and provide a more efficient filter.

Claims 2, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohbeck in view of Koehler et al. as applied to claims 1 and 5 above, and further in view of Worrall et al.

Lohbeck in view of Koehler et al. discloses all the limitations of the above claims except, neither Lohbeck nor Koehler et al. shows that the expander assembly can be used to expand the screen from top to bottom. Worrall et al. (Fig. 7, col. 3 line 49- col. 4 line 4) discloses a method of expansion of a wellbore casing where the expander (7,22) is either used in an upward or downward (22) fashion.

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Claims 3, 6, 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohbeck in view of Koehler et al. as applied to claims 1 and 5 above, and further in view of Vincent '483.

Lohbeck in view of Koehler et al. discloses all the limitations of the above claim as previously stated, except, neither Lohbeck nor Koehler et al. shows a downhole force generator operably attached to the expansion cone. Vincent '483 (Fig. 7-10, col. 5 line 45- col. 7 line 4) shows an activated motor assembly (137, 151, 156) attached to a cone (13) used in the radial expansion of a wellbore casing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the motor assembly of Vincent '483 with the downhole system presented by Lohbeck in view of Koehler et al. This would be done to provide greater automation, and is preferred as stated in Vincent '483.

With regards to claims 3, 6, 10, and 11, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a downhole battery with the motor of Vincent '483, to eliminate the need for a downhole powerline.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P Stephenson whose telephone number is (703) 605-4969. The examiner can normally be reached on 7:30 - 5:00 M-TH and every other Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (703) 308-2151. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-4180.

DPS

September 6, 2001

DAVID BAGNELL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

<b>Notice of References Cited</b>	Application/Control No. 09/627,195	Applicant(s)/Patent Under Reexamination ECHOLS ET AL.	
	Examiner Daniel P Stephenson	Art Unit 3673	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification	
	A	US-6263966	07-2001	Haut et al.	166	278
	B	US-5366012	11-1994	Lohbeck	166	277
	C	US-5348095	09-1994	Worrall et al.	166	380
	D	US-5664628	09-1997	Koehler et al.	166	369
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

**FOREIGN PATENT DOCUMENTS**

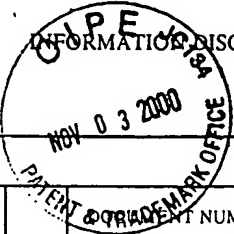
*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification	
	N						
	O						
	P						
	Q						
	R						
	S						
	T						

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



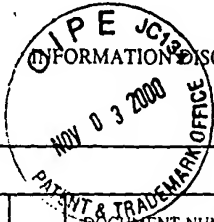
FORM PTO-1449 (Rev. 8-83)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 990453 U1 USA		SERIAL NO. 09/627,195	
INFORMATION DISCLOSURE STATEMENT 				APPLICANT Ralph H. Echols & Perry C. Shy			
				FILING DATE July 27, 2000		GROUP	
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	PATENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
DPS	1,514,062	11/1924	McLain				
DPS	3,179,168	04/1965	Vincent	166	14	RECEIVED NOV 08 2000	
DPS	3,203,483	08/1965	Vincent	166	207		
DPS	3,270,817	09/1966	Papaila	166	46	TO 3600 MAIL ROOM	
DPS	3,353,599	11/1967	Swift	166	15		
DPS	3,477,506	11/1969	Malone	166	207		
DPS	3,498,376	03/1970	Sizer et al	166	120		
DPS	3,669,190	06/1972	Sizer et al	166	315		
DPS	3,746,091	07/1973	Owen et al	166	207		
DPS	3,776,307	12/1973	Young	166	125		
DPS	4,095,825	06/1978	Butler	285	55		
DPS	4,687,232	08/1987	Zimmerman	285	31		
DPS	5,014,779	05/1991	Meling et al	166	55.7		
DPS	5,667,011	09/1997	Gill et al	166	295		
DPS	5,924,745	07/1999	Campbell	285	90		
DPS	5,984,568	11/1999	Lohbeck	403	375		
DPS	6,012,523	01/2000	Campbell et al	166	277		
DPS	6,021,850	02/2000	Wood et al	166	380		
DPS	6,029,748	02/2000	Forsyth et al	166	380		
DPS	6,070,671	06/2000	Cumming et al	166	381		

EXAMINER



DATE CONSIDERED

9/6/01

FORM PTO-1449 (Rev. 8-83)		U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. <b>990453 U1 USA</b>		SERIAL NO. <b>09/627,195</b>	
 INFORMATION DISCLOSURE STATEMENT				APPLICANT <b>Ralph H. Echols &amp; Perry C. Shy</b>			
				FILING DATE <b>July 27, 2000</b>		GROUP	
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	

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## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	NAME	CLASS	SUBCLASS
DPS	WO 96/37680	11/1996	WIPO			
DPS	WO 97/17527	05/1997	WIPO			
DPS	WO 98/49423	11/1998	WIPO			
DPS	WO 99/56000	11/1999	WIPO			
DPS	WO 00/26500	05/2000	WIPO			
DPS	WO 00/26501	05/2000	WIPO			
DPS	WO 00/26502	05/2000	WIPO			
DPS	GB 2 344 606 A	06/2000	Great Britain			


## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)


EXAMINER



DATE CONSIDERED

9/6/01

FORM PTO-1449 (Rev. 8-83)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO 990453 U1 USA		SERIAL NO 09/627,195	
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT				APPLICANT Echols, et al			
				FILING DATE July 27, 2000		GROUP 3672	
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
DPS	6,263,972 B1	7/24/01	Richard	166	381		
							
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
None							
EXAMINER Daniel P. Luyke				DATE CONSIDERED 9/6/01			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

## INFORMATION ON HOW TO EFFECT DRAWING CHANGES

### 1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

### 2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

#### Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.

06/01/01